

**IN THE DRAWINGS:**

Fig. 5 has been amended to correct the descriptors of the axes. The vertical axis descriptor  $\Delta$  TORQUE has been amended to  $\Delta$  TORQUE/ $\Delta$  TURNS. The horizontal axis descriptor  $\Delta$  TURNS has been amended to TURNS.

One replacement sheet is included with this response.

## REMARKS

This is intended as a full and complete response to the Office Action dated January 27, 2006, having a shortened statutory period for response set to expire on April 27, 2006. Please reconsider the claims pending in the application for reasons discussed below.

In the specification (US 2004/0144547), paragraphs [0009], [0010], [0048], [0059], and [0063] have been amended. No new matter has been added by the amendments.

In the drawings, Fig. 5 has been amended to correct the descriptors of the axes. The vertical axis descriptor  $\Delta$  TORQUE has been amended to  $\Delta$  TORQUE/ $\Delta$  TURNS. The horizontal axis descriptor  $\Delta$  TURNS has been amended to TURNS. One replacement sheet is included with this response. No new matter has been added by the amendments.

Claims 1, 3, 5-9, 13-21, 24-26, and 28-45 remain pending in the application after entry of this response. Claims 1-45 are rejected by the Examiner. Claims 1, 3, 5-9, 13, 16-18, 21, 24, and 40 have been amended. No new matter has been added by the amendments. Claims 2, 4, 10-12, 22, 23, and 27 have been canceled without prejudice.

### ***Claim Rejections Under 35 U.S.C. § 102***

Claims 1, 6, 11, 22, and 23 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Vincent* (US Re. 34,063). Claims 22 and 23 have been canceled. *Vincent* does not teach, suggest, or disclose either “detecting a shoulder condition during rotation of the first threaded tubular member by calculating and monitoring a change of torque with respect to rotation;” or “stopping rotation of the first threaded member when reaching a predefined rotation value from the shoulder condition,” as recited in amended claims 1. *Vincent* teaches monitoring a rate of change of torque with respect to time (col. 2, lines 10-12) and teaches using a torque differential after the shoulder condition is reached to terminate make-up (col. 2, lines 28-47). Therefore, claim 1 and its dependents are not anticipated by *Vincent*.

### ***Claim Rejections Under 35 U.S.C. § 103***

Claims 2-5, 7-10, 12-21, and 24-45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Vincent*, in view of *McCombs* (US 4,365,402) or *Okada* (US 5,402,688) or *Weiner* (US 4,091,451). As discussed above, *Vincent* does not teach, suggest, or disclose monitoring a change in torque with respect to rotation to detect the shoulder or using a rotation value to terminate make-up after the shoulder is reached as recited in amended claim 1 (and also recited in amended claim 24). Further, *Vincent* unmistakably teaches away from a combination with any of *McCombs*, *Okada*, or *Weiner* by stating:

With the present invention, applicants have determined that the prior tubular goods torque monitoring techniques, with the acceptability-nonacceptability criteria being based on the interrelationship between the torque sensed and the number of turns made during make-up, are unacceptable. Specifically, since a shoulder condition can be achieved in a smaller portion of a turn of the connection than that usually sensed in torque-turn monitoring, the prior torque-turns technique and philosophy are substantially unsuitable for premium threaded connections.

(Col. 5, lines 15-26, emphasis added; see also col. 2, lines 3-9). Therefore, the combination of *Vincent* with any of any of *McCombs*, *Okada*, or *Weiner* is improper. Withdrawal of the rejection is respectfully requested.

Claims 26 and 36-39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Vincent* in view of *McCombs* or *Okada* or *Weiner* as applied to claim 24 above, and further in view of Bromell (US 3,662,842) or Juhasz (US 6,443,241). As discussed above, *Vincent* teaches away from a combination with any of *McCombs*, *Okada*, or *Weiner* by disparaging the torque-turns approach and touting the advantages of a torque-time approach. Therefore, any further combination with *Vincent* is also improper. Withdrawal of the rejection is respectfully requested.

### ***Double Patenting***

Claims 1, 10, 11, and 13 – 15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 41-45, 48-50, 52-58, 74, 75, and 81-88 of copending Application No. 10/389,483. Claims 2-9, 12, and 16-45 are provisionally rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 41-45, 48-50, 52-

58, 74, 75, and 81-88 of copending Application No. 10/389,483 in view of Vincent, et al. (US Re. 34,063). A terminal disclaimer is included with this response to overcome this rejection. Withdrawal of the provisional rejection is respectfully requested.

***Supplemental Information Disclosure Statement (SIDS)***

A SIDS is being filed with this response.

***Conclusion***

The references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,

  
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William B. Patterson  
Registration No. 34,102  
PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd. Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicants